5톤/일 shaft형 pilot plant에서 자동차 폐차 잔재의 가스화 용융 특성

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Gasification melting characteristics of Automobile shredder residue in 5t/d shaft pilot plant

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ELVs (End-of-Vehicles) in Korea incrasease continusely because of increase of used car. Automobile Shredder Residue (ASR) is final product of ELVs (End-of-Vehicles) after recycling. Automobile Shredder Residue are composed of light and heavy fluffs and soil/dust. In this study, 5 ton/day pilot plant of shaft type has been designed and constructed and 15 times of test run were performed. For the stable operation, operation conditions such as the amount of fed ASR and cokes, air flow and temperature in the gasification melting system have been changed and the composition of the produced gas such as H₂, CO and CH₄ and air pollution compound including dioxin discharged from the stack have been analyzed.

Key words: Automobile shredder residue(폐차잔재), ELVs(폐차), Pilot plant, Gasification melting(가스화 용융)

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